

WHAT IS CLAIMED IS:

1. A surface acoustic wave device, comprising:  
a surface acoustic wave element;  
an electronic component that drive controls the surface acoustic wave element;  
a first substrate that defines an opening and which has a first connecting terminal electrically connected to the electronic component;  
a first hollow component formed above the first substrate that accommodates the electronic component;  
a second connecting terminal formed in the vicinity of the opening, and electrically connected to the first connecting terminal;  
a second substrate which is mounted so that one face side is joined to the opening of the first substrate and an other face side allows the surface acoustic wave element to be electrically connected to the second connecting terminal; and  
a cap which is joined to the first substrate and has a second hollow component that hermetically seals the surface acoustic wave element.
2. The surface acoustic wave device according to Claim 1, the first substrate and the second substrate being joined on a lateral face side of the second substrate with a sealant.
3. The surface acoustic wave device according to Claim 1, second substrate and the cap being joined to the first substrate, respectively with a same sealant.
4. The surface acoustic wave device according to Claim 1, the sealant being made of at least one of a conductive brazing metal and a conductive adhesive.
5. The surface acoustic wave device according to Claim 1, the sealant being made of a glassy material.
6. The surface acoustic wave device according to Claim 1, further including a grounding electrode formed on the one face side of the second substrate.
7. The surface acoustic wave device according to Claim 1, the second substrate including a ceramic single plate.
8. The surface acoustic wave device according to Claim 1, the electronic component being a flip-chip mounted to the first substrate.
9. The surface acoustic wave device according to Claim 1, the surface acoustic wave element being mounted on the second substrate with an adhesive, and the electronic

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component being mounted on the first substrate with a same adhesive as that used to mount the surface acoustic wave element.

10. A manufacturing method of a surface acoustic wave device having a surface acoustic wave element and an electronic component that drive controls the surface acoustic wave element, the manufacturing method of the surface acoustic wave device comprising:

mounting the electronic component in a first hollow component that is above a first substrate that defines an opening;

mounting the surface acoustic wave element above a second substrate;

aligning the second substrate in the opening of the first substrate;

electrically connecting the electronic component and the surface acoustic wave element;

performing frequency adjustment of the surface acoustic wave element;

arranging a cap with a second hollow component above the first substrate so as to accommodate the surface acoustic wave element in the second hollow component, and the first substrate and the second substrate; and

joining the first substrate and the cap with a sealant, respectively, to seal the electronic component and the surface acoustic wave element.

11. The manufacturing method of the surface acoustic wave device according to Claim 10, further including arranging the second substrate in the opening of the first substrate in a state such that the sealant is applied on a lateral face side of the second substrate.

12. The manufacturing method of the surface acoustic wave device according to Claim 10, further including forming a grounding electrode made of a conductive material on a joint face with the first substrate at the second substrate.

13. The manufacturing method of the surface acoustic wave device according to Claim 10, further including utilizing sealant to join the first substrate and the second substrate, and sealant to join the first substrate and the cap that are the same sealant.

14. The manufacturing method of the surface acoustic wave device according to Claim 10, further including utilizing at least one of a brazing metal and a conductive adhesive as the sealant.

15. The manufacturing method of the surface acoustic wave device according to Claim 10, further including forming the sealant of a glassy material.

16. The manufacturing method of the surface acoustic wave device according to Claim 11, further including, when the electronic component is mounted to the first substrate, performing mounting by flip-chip bonding.